

IN THE CLAIMS

1. (Currently Amended) A wavelength locker module comprising:

a prism configured to divide incident light into at least first and second branched light beams;

a wavelength selective filter configured to permit part of the first branched light beam emitted from said prism to pass therethrough;

a first light quantity detector configured to receive the part of the first branched light beam having passed through said wavelength selective filter; and

a second light quantity detector configured to receive the second branched light beam emitted from said prism, wherein

said wavelength selective filter has a light transmission characteristic providing more than predetermined ratio of a change in optical transmittance to a change in wavelength of the incident light in a wavelength region including an incident light wavelength.

Claim 2 (Canceled)

3. (Previously Presented) The wavelength locker module according to claim 1,

further comprises an angle adjuster configured to variably adjust an orientation of said wavelength selective filter with respect to said prism, so that an incident angle of the first branched light into said wavelength selective filter is adjusted to be in a range from 0 deg to 5 deg.

4. (Original) The wavelength locker module according claim 1,

wherein said prism has a roof-shaped incident surface thereof comprised of first and second inclination surface each obliquely extending relative to a normal line

of the incident light entering said prism, and said prism branches the incident light into said first and second branched light beams.

5. (Original) The wavelength locker module according to claim 4,

wherein an angle formed between each of said first and second inclination surfaces and the normal line of said first and second incident light to said prism is in a range from 10 deg to 65 deg.

6. (Previously Presented) A wavelength controller comprising:

a wavelength locker module having a prism configured to divide incident light into at least first and second branched light beams;

a wavelength selective filter configured to permit part of the first branched light beam emitted from said prism to pass therethrough;

a first light quantity detector configured to receive the part of the first branched light beam having passed through said wavelength selective filter;

and a second light quantity detector configured to receive the second branched light beam emitted from said prism;

a wavelength variation detector which is configured to detect, based on outputs of first and second light quantity detectors of the wavelength locker module, a wavelength variation in incident light entering the wavelength locker module; and

a wavelength variation suppressing mechanism which is configured to suppress the wavelength variation in accordance with a detection result obtained by said wavelength variation detector.

7. (Previously Presented) The wavelength controller according to claim 6,

wherein said wavelength variation detector is configured to calculate an output ratio based on the outputs of said first and second light quantity detectors, and detects the wavelength variation in the incident light based on the output ratio and a wavelength

variation detection curve representing a relationship between the incident light wavelength and the output ratio.

8. (Previously Presented) The wavelength controller according to claim 6, wherein said wavelength variation suppressing mechanism includes a temperature adjustor configured to adjust a temperature of an optical signal generator for use with the wavelength controller.

9. (Previously Presented) The wavelength controller according to claim 6, wherein said wavelength locker module has a wavelength selective filter having a light transmission characteristic providing more than a predetermined ratio of a change in optical transmittance to a change in wavelength of the incident light in a wavelength region including an incident light wavelength.

10. (Previously Presented) The wavelength controller according to claim 6, further comprising an angle adjuster configured to variably adjust orientation of said wavelength selective filter with respect to said prism, such that an incident angle of the first branched light into said wavelength selective filter is adjusted to be in a range from 0 deg to 5 deg.

11. (Previously Presented) The wavelength controller according to claim 6, wherein the prism in said wavelength locker module has a roof-shaped incident surface thereof comprised of first and second inclination surface each obliquely extending relative to a normal line of the incident light entering said prism, and said prism branches the incident light into said first and second branched light beams.

12. (Previously Presented) The wavelength controller according to claim 11, wherein an angle formed between each of said first and second inclination surfaces and the normal line of said first and second incident light to said prism is in a range from 10 deg to 65 deg.